

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A channel structuring method of configuring channels wherein transmission signals are modulated by orthogonal frequency division multiplexing comprising  $n$  sub-carriers and multiplexed by time division multiplexing to configure downlink channels, said method comprising:

a step of selecting from the  $n$  sub-carriers, a predetermined number of sub-carriers for insertion of common control channel signals and common pilot signals; and

a step of inserting a common control channel signal and a common pilot signal into the selected sub-carriers.

Claim 2 (Previously Presented): A channel structuring method as claimed in claim 1, comprising:

a step of providing time frames by segmenting a communication channel of said  $n$  subcarriers at every predetermined interval, and

a step of selecting a predetermined number of subcarriers from said  $n$  subcarriers, and periodically inserting the common control channel signal and the common pilot signal into every time frame of said selected subcarriers.

Claim 3 (Original): A channel structuring method as claimed in claim 2 wherein, in regard to the common control channel signal and the common pilot signal periodically inserted into every time frame of said selected subcarriers, either the common control channel signal or the common pilot signal, or both thereof, is/are inserted at the same timing as either the common control channel signal or the common pilot signal, or both thereof of other subcarriers.

Claim 4 (Original): A channel structuring method as claimed in claim 1, comprising:  
a step of providing time frames by segmenting a communication channel of said n subcarriers at every predetermined interval,  
a step of selecting a predetermined number of subcarriers from said n subcarriers, and inserting the common control channel signal continuously into the time frame of said selected subcarriers, and  
a step of selecting a predetermined number of subcarriers from said n subcarriers, and inserting the common pilot signal periodically into every time frame of said selected subcarriers.

Claim 5 (Original): A channel structuring method as claimed in claim 1, comprising:  
a step of providing time frames by segmenting a communication channel of said n subcarriers at every predetermined interval,  
a step of selecting a predetermined number of subcarriers from said n subcarriers, and inserting the common pilot signal continuously into the time frame of said selected subcarrier, and  
a step of selecting a predetermined number of subcarriers from said n subcarriers, and inserting the common control channel signal periodically into every time frame of said selected subcarriers.

Claim 6 (Currently Amended): A channel structuring method as claimed in claim 4, wherein the selected subcarriers into which said common control channel signal is inserted are either completely or partially the same as the subcarriers into which the common pilot signal is inserted ~~periodically into every time frame of said selected subcarriers.~~

Claim 7 (Original): A channel structuring method as claimed in claim 1, comprising:

- a step of providing time frames by segmenting a communication channel of said n subcarriers at every predetermined interval,
- a step of selecting a predetermined number of subcarriers from said n subcarriers, and inserting the common control channel signal continuously into the time frame of said selected subcarriers, and
- a step of selecting a predetermined number of subcarriers from said n subcarriers, and inserting the common pilot signal continuously into the time frame of said selected subcarriers.

Claim 8 (Previously Presented): A base station in which transmission signals are modulated by orthogonal frequency division multiplexing comprising n sub-carriers and multiplexed by time division multiplexing to configure downlink channels, comprising:

- a common channel signal insertion unit selecting, from the n sub-carriers, a predetermined number of sub-carriers for insertion of common control channel signals and inserting a common control channel signals into the selected sub-carriers, and
- a pilot signal insertion unit selecting, from the n sub-carriers, a predetermined number of sub-carriers for insertion of common pilot signals and inserting a common pilot signals into the selected sub-carriers.

Claim 9 (Previously Presented): A base station as claimed in claim 8, wherein

- time frames are provided by segmenting a communication channel of said n subcarriers at every predetermined interval, and

said common control channel signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common control channel signal periodically into every time frame of said selected subcarriers.

Claim 10 (Previously Presented): A base station as claimed in claim 8, wherein time frames are provided by segmenting a communication channel of said  $n$  subcarriers at every predetermined interval, and

said common pilot signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common pilot signal periodically into every time frame of said selected subcarriers.

Claim 11 (Previously Presented): A base station as claimed in claim 9, wherein said common pilot signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers and inserting the common pilot periodically into every time frame of said selected subcarriers, and

said common control channel signal insertion unit and said common pilot signal insertion unit insert the common control channel signal and the common pilot signal, respectively, into said selected subcarriers such that a timing of the insertion of either the common control channel signal or the common pilot signal, or both, are same as the timing of either the common control channel signal or the common pilot signal, or both, of other subcarriers.

Claim 12 (Previously Presented): A base station as claimed in claim 8, wherein time frames are provided by segmenting a communication channel of said  $n$  subcarriers at every predetermined interval,

said common control channel signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common control channel signal continuously into every time frame of said selected subcarriers, and

said common pilot signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common pilot signal periodically into every time frame of said selected subcarriers.

Claim 13 (Previously Presented): A base station as claimed in claim 8, wherein time frames segmented in the communication channel of said  $n$  subcarriers at every predetermined interval are set up,

said common pilot signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common pilot signal continuously into every time frame of said selected subcarriers, and

said common control channel signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common control channel signal periodically into every time frame of said selected subcarriers.

Claim 14 (Previously Presented): A base station as claimed in claim 12, wherein the subcarriers into which said common control channel signal is inserted by said common control channel signal insertion unit are completely or partially the same as the subcarriers into which the common pilot signal is inserted by said common pilot signal insertion unit.

Claim 15 (Previously Presented): A base station as claimed in claim 8, wherein time frames are provided by segmenting a communication channel of said  $n$  subcarriers at every predetermined interval, and

said common control channel signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common control channel signal continuously into every time frame of said selected subcarriers, and

said common pilot signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common pilot signal continuously into every time frame of said selected subcarriers.

Claim 16 (Currently Amended): A channel structuring method as claimed in claim 5, wherein the selected subcarriers into which said common control channel signal is inserted are either completely or partially the same as the subcarriers into which the common pilot signal is inserted ~~periodically into every time frame of said selected subcarriers.~~

Claim 17 (Previously Presented): A base station as claimed in claim 9, wherein time frames are provided by segmenting a communication channel of said  $n$  subcarriers at every predetermined interval, and

said common pilot signal insertion unit selects a predetermined number of subcarriers from said  $n$  subcarriers, and inserts the common pilot signal periodically into every time frame of said selected subcarriers.

Claim 18 (Previously Presented): A base station as claimed in claim 13, wherein the subcarriers into which said common control channel signal is inserted by said common control channel signal insertion unit are completely or partially the same as the

subcarriers into which the common pilot signal is inserted by said common pilot signal insertion unit.